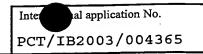


INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PH/822/INT	FOR FURTHER ACTION See Form PCT/IPEA/416				
International application No.	International filing date (day/month/)	pear) Priority date (day/month/year)			
PCT/IB2003/004365	01-10-2003	09-10-2002			
International Patent Classification (IPC) or national classification and IPC					
G06F13/28	G06F13/28				
•	:				
Applicant		•			
NOKIA CORPORATION ET	ΔТ. ·				
	eliminary examination report, establishe ansmitted to the applicant according to	ed by this International Preliminary Examining Article 36.			
2. This REPORT consists of a total	of sheets, including the	nis cover sheet.			
This report is also accompanied b	y ANNEXES, comprising:				
a. (sent to the applicant	and to the International Bureau) a tota	sheets, as follows:			
		ich have been amended and are the basis of this report			
	containing rectifications authorized by re Instructions).	this Authority (see Rule 70.16 and Section 607 of the			
	•	Authority considers contain an amendment that goes			
beyond the di Supplemental		as filed, as indicated in item 4 of Box No. I and the			
. []					
b (sent to the Internation	anal Bureau only) a total of (indicate ty				
readable form only, a		elisting and/or tables related thereto, in computer elating to Sequence Listing (see Section 802 of the			
Administrative Instru					
4. This report contains indications re					
	f the report				
Box No. II Priority					
Box No. III Non-est	ablishment of opinion with regard to no	ovelty, inventive step and industrial applicability			
Box No. IV Lack of	unity of invention				
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
Box No. VI Certain	documents cited				
Box No. VII Certain defects in the international application					
Box No. VIII Certain observations on the international application					
Date of submission of the demand	Date of com	pletion of this report			
04-05-2004	02-11-	02-11-2004			
Name and mailing address of the IPEA/SE		Authorized officer			
Patent- och registreringsverket					
Box 5055 S-102 42 STOCKHOLM Pär Heimdal /LR					
Facsimile No. +46 8 667 72 88	I	Telephone No. +46, 8, 782, 25, 00			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY



Во	x No. I	Basis of the report			
1.		regard to the language, this report is based on the international application in the language in which it was filed, unless vise indicated under this item.			
		This report is based on a translation from the original language into the following language which is the language of a translation furnished for the purposes of:			
	international search (under Rules 12.3 and 23.1(b))				
		publication of the international application (under Rule 12.4)			
		international preliminary examination (under Rules 55.2 and/or 55.3)			
2.	furnish	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed and are not annexed to this report): The international application as originally filed/furnished			
		the description:			
		es originally filed/furnished			
		pages as originary most among a second as originary most and a second as originary most among a second as originary most and a second as originary most among a second as originary most among a second as originary most and a second			
		pages* received by this Authority on			
		the claims:			
		pages as originally filed/furnished			
		pages* as amended (together with any statement) under Article 19			
		pages* received by this Authority on			
		pages* received by this Authority on			
		the drawings:			
		pages as originally filed/furnished			
		pages* received by this Authority on			
		pages* received by this Authority on			
		a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.			
3.		The amendments have resulted in the cancellation of:			
		the description, pages			
		the claims, Nos.			
		the drawings, sheets/figs			
		the sequence listing (specify):			
		any table(s) related to the sequence listing (specify):			
4.		This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).			
		the description, pages			
		the claims, Nos.			
		the drawings, sheets/figs			
		the sequence listing (specify):			
		any table(s) related to the sequence listing (specify):			
*	If item	4 applies, some or all of those sheets may be marked "superseded."			

INTERNATIONAL PRELIMARY REPORT ON PATENTABILITY

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:					
	the entir	international application			
\boxtimes	claims N	os. 17-18			
beca	use:				
	the said relate to	nternational application, or the said claims Nos. the following subject matter which does not require an international preliminary examination (specify):			
		ption, claims or drawings (indicate particular elements below) or said claims Nos. lear that no meaningful opinion could be formed (specify):			
		, or said claims Nos are so inadequately supported cription that no meaningful opinion could be formed.			
\boxtimes	no intern	tional search report has been established for said claims Nos. 17-18			
	the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:				
	the writte	form has not been furnished			
		does not comply with the standard			
	the comp	ter readable form has not been furnished			
 1	1 1	does not comply with the standard			
		related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with cal requirements provided for in the Annex C-bis of the Administrative Instructions.			
	See Supp	emental Box for further details.			

INTERNATIONAL PRELIMARY REPORT ON PATENTABILITY

Internal application No.
PCT/IB2003/004365

Во	x No. V	Reasoned statement u		85(2) with regard to novelty, inventive ng such statement	step or industrial applicability;
1.	Statement				•
	Novel	ty (N)	Claims	1-16	YES
			Claims		NO
	Invent	ive step (IS)	Claims	1-16	YES
			Claims		NO NO
	Indust	rial applicability (IA)	Claims	1-16	YES
	111000	in approximity (in 1)	Claims		NO

2. Citations and explanations (Rule 70.7)

CITATIONS

The examination process has revealed the following document:

D1: US 2002052987 A1 D2: WO 0196979 A2 D3: US 2001049755 A1

THE INVENTION

The claimed invention according to claims 1-16 solves the problem of improving USB data transfer by polling a host whether a device supports direct memory access.

STATEMENT

Document D1, which is regarded as being the closest prior art to the subject-matter of the claimed invention, reveals a host controller interface descriptor fetching unit, see abstract and claim 1. The invention according to D1 relates to a method and circuit for prefetching direct memory access descriptors from memory of a computer system.

Dl relates to a circuit and method for fetching descriptors used in direct memory access transfers. The descriptors are commands to the DMA controllers to transfer data to and from the memory, and contain fields that identify the memory location where the data is to be transferred, the number of bits at that memory location to be transferred, and a pointer to a subsequent DMA descriptor (paragraph [0006]).

There is no disclosure within Dl of information concerning the DMA capabilities of a device being communicated to a host to which it can be attached for serial data communications. Dl only discloses the internal workings of a host.

• . . . / . . .

Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of: BOX V

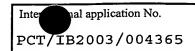
The documents D2-D3 cited in the International Search Report represents the general state of the art, not being of particular relevance.

None of the documents D1-D3 cited in the International Search Report, or any relevant combination of them reveals a direct memory access detection as defined by claims 1-16.

It would not be obvious to a person skilled in the art to apply the features from the cited documents D1-D3 and thus arrive at the invention as revealed in claims 1-16. Therefore, the subject matter of these claims fulfils the requirements of novelty, inventive step and industrial applicability according to PCT Article 33(2,3,4).

Box No. VI	Certain document	.s cited		
1. Certain	n published documents ((Rule 70.10)		
	Application No. Patent No.	Publication date (day/month/year)		Priority date (valid claim) (day/month/year)
US 65	98097 B1 2	22/07/2003	29/02/2000	
			·	
2. Non-wr	ritten disclosures (Rule	70.9)		Date of written disclosure
	Kind of non-written of		of non-written disclosure (day/month/year)	referring to non-written disclosure (day/month/year)
				·
		•		
	•			

INTERNATIONAL PRELIMARY REPORT ON PATENTABILITY



Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The invention according to claims 5-6 and 12 are not considered to be clear and concise in the meaning of Article 6, PCT. The scope of the claims 5-6 and 12 is not clearly defined and the vague way of claiming could generate confusion concerning the claimed area of protection.

To define the descriptor as a non-standard descriptor is not considered to be clear and concise in the meaning of Article 6, PCT.